Table 1: HEPARANASE SEQUENCE HOMOLOGY DATA

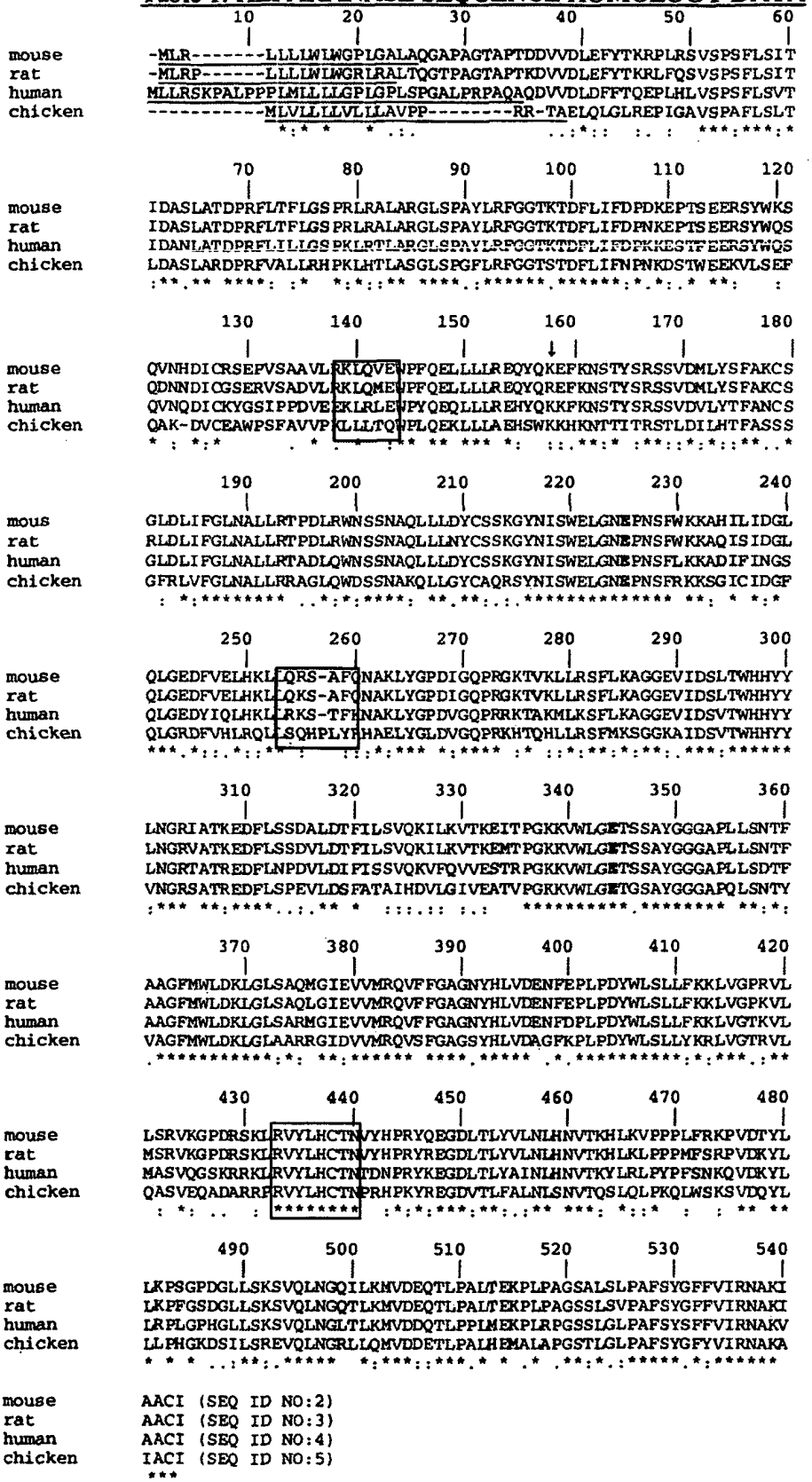


Table 2- FUNCTIONAL PEPTIDE EPITOPES OF HEPARANASE

Peptide	Amino acid sequence	Location in SEQ ID NO 10	Property
p8 #7 SEQ ID NO:7	PAYLRFGGTKTDFLIFDP K	89-107	C-terminus of P8 - Dimerization
pep38 SEQ ID NO:6	CTNTDNPRYK	437-446	located 5 amino acids downstream of a heparin binding site
pep8 SEQ ID NO:8	SWELGNEPNSFLKKA	219-233	contains the proton donor residue of the heparanase active site
pep9 SEQ ID NO:9	RPGKKVWLGETSSAY	334-348	contains the nucleophilic residue of the active site
Pep10 SEQ ID NO:10	TWHHYYLNGRTATR	294-307	Designed according to a 3D model as a surface exposed sequence, which bridges substrate binding and active site.

*NOTE: Specific peptide sequences are underlined in the sequence below
*NOTE: Mature heparanase dimer sequences in **bold face**:

MLLRSKPALPPPLMLLLLGPLGPLSPGALPRPAQA**QDVVDLDFFTQEPLH**
LVSPSFLSVTIDANLATDPRFLILLGSPKLRTLARGLSPAYLRFGGTKTD
FLIFDPKKESTFEERSYWQSQVNQDICKYGSIPPDVEEKLRLEWPYQEQL
LLREHY**QKKFKNSTYSRSSVDVLYTFANCSGLDLIFGLNALLRTADLQWN**
SSNAQLLLDYCSSKGYNISWELGNEPNSFLKKADIFINGSQLGEDFIQLH
KLLRKSTFKNAKLYGPDVGQPRRKTAKMLKSFLKAGGEVIDSVTWHHYYL
NGRTATREDFLNPDVLDIFISSVQKVFQVVESTRPGKKVWLGETSSAYGG
GAPLLSDTFAAGFMWLDKLGLSARMGIEVVMRQVFFGAGNYHLVDENFDP
LPDYWLSLLFKKLVGTKVLMASVQGSKRRKLRVYLHCTNTDNPRYKEGDL
TLYAINLHNVTKYLRLPYPFSNKQVDKYLLRPLGPHGLLSKSVQLNGLTL
KMVDDQTLPPLMEKPLRPGSSLGLPAFSYSFFVIRNAKVAACI (SEQ ID NO:4)

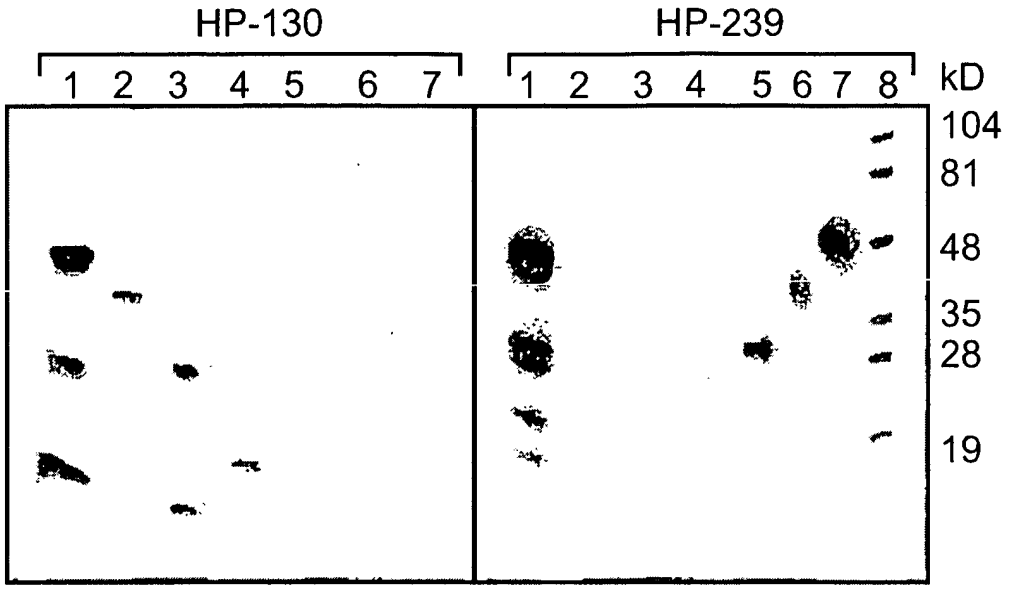


Fig. 1

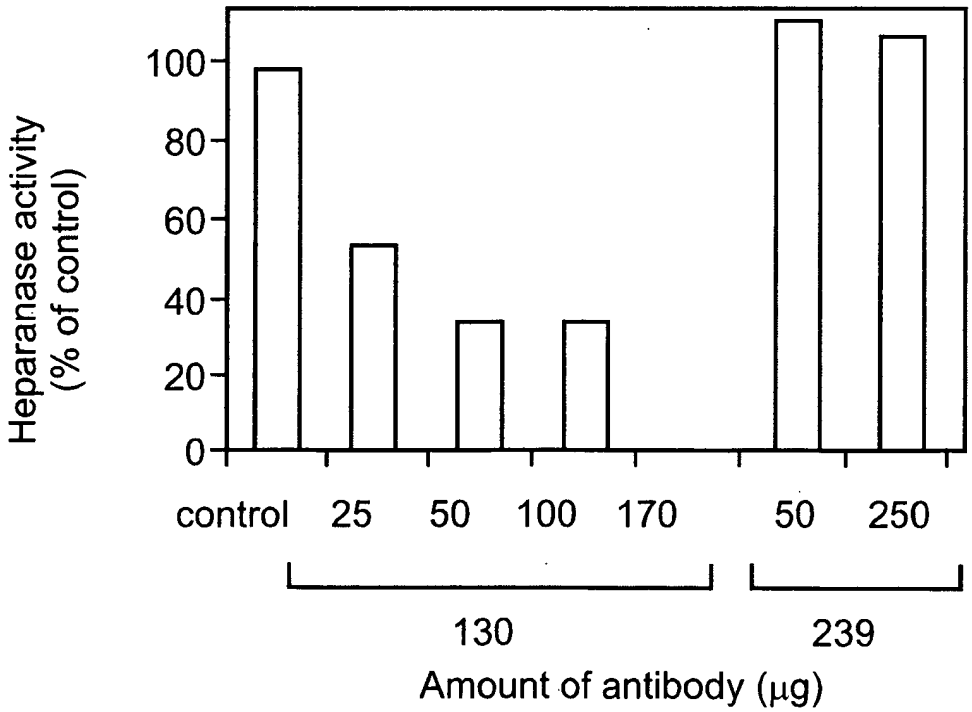


Fig. 2

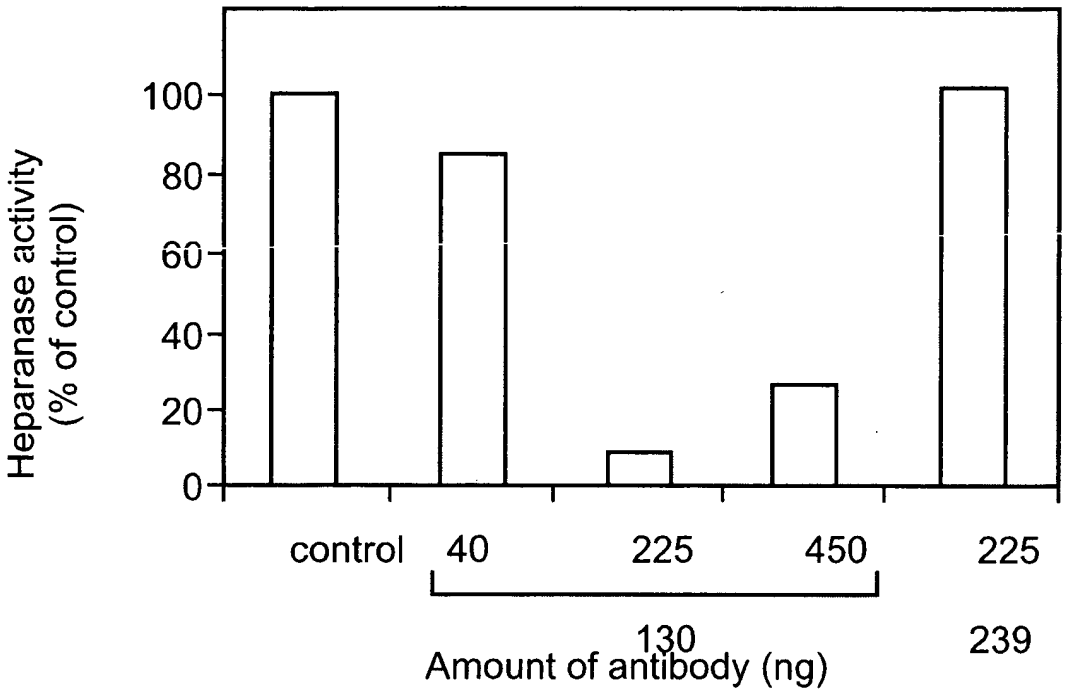


Fig. 3

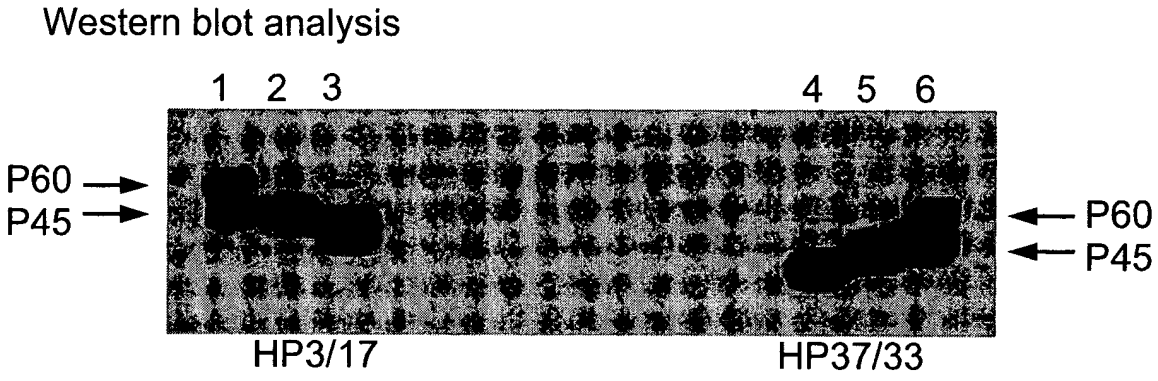


Fig. 4

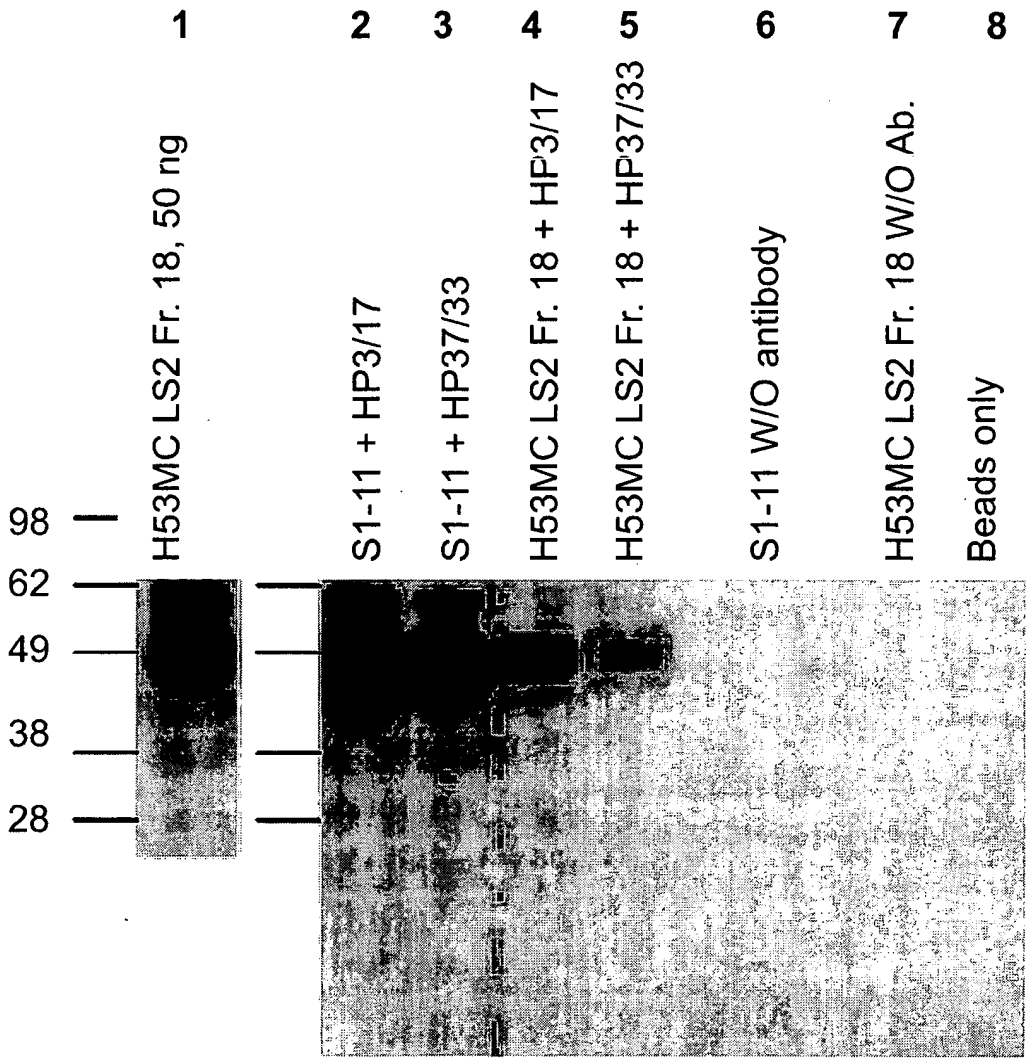


Fig. 5

Fig. 6a

Fig. 6b

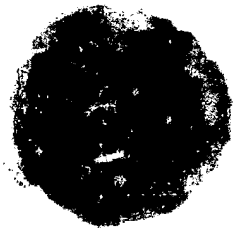


Fig. 6c

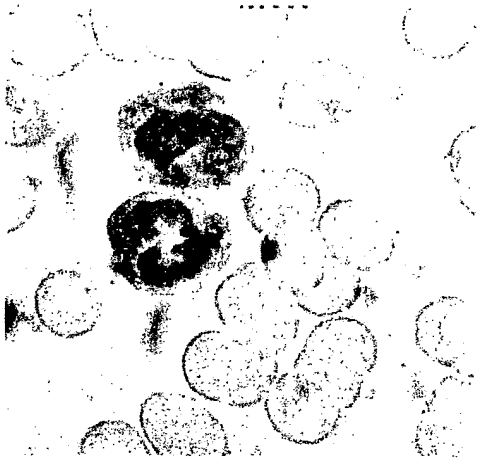


Fig. 6d

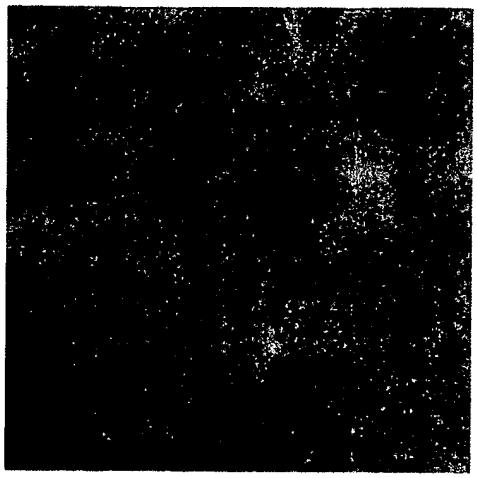


Fig. 7a

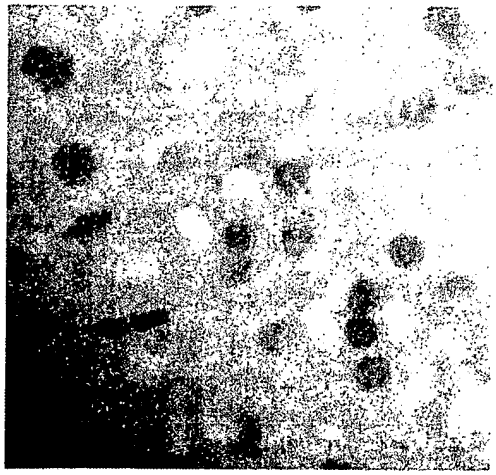


Fig. 7b

Fig. 8a

Fig. 8b

x 100

x 400

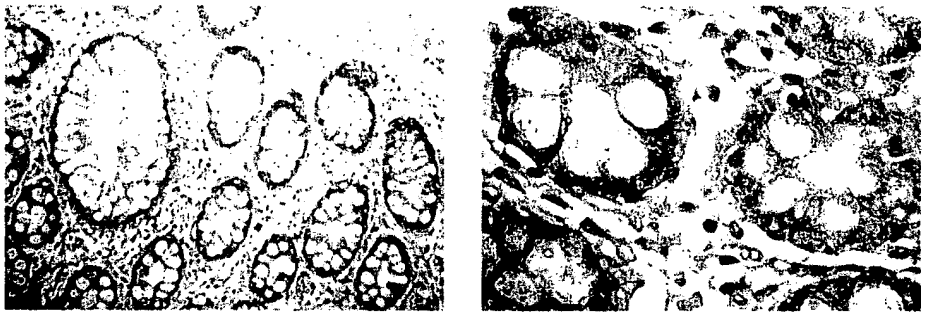


Fig. 9a

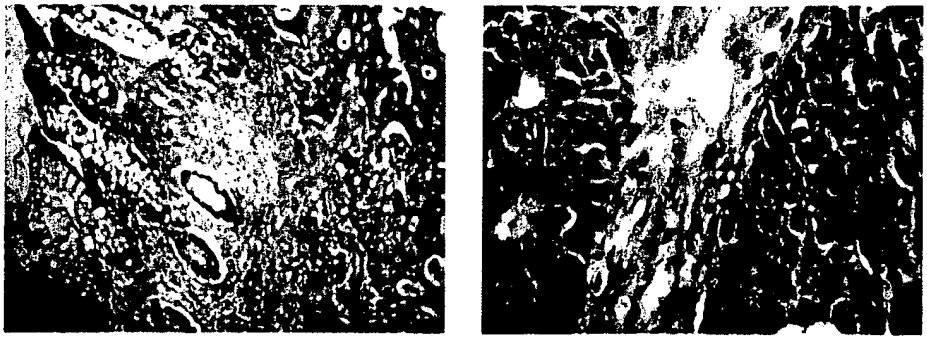


Fig. 9b

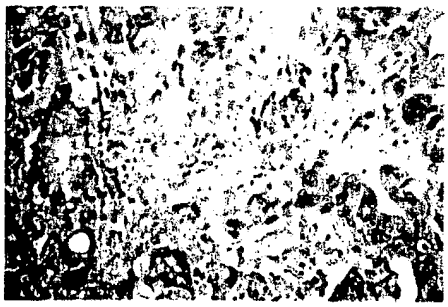


Fig. 9c

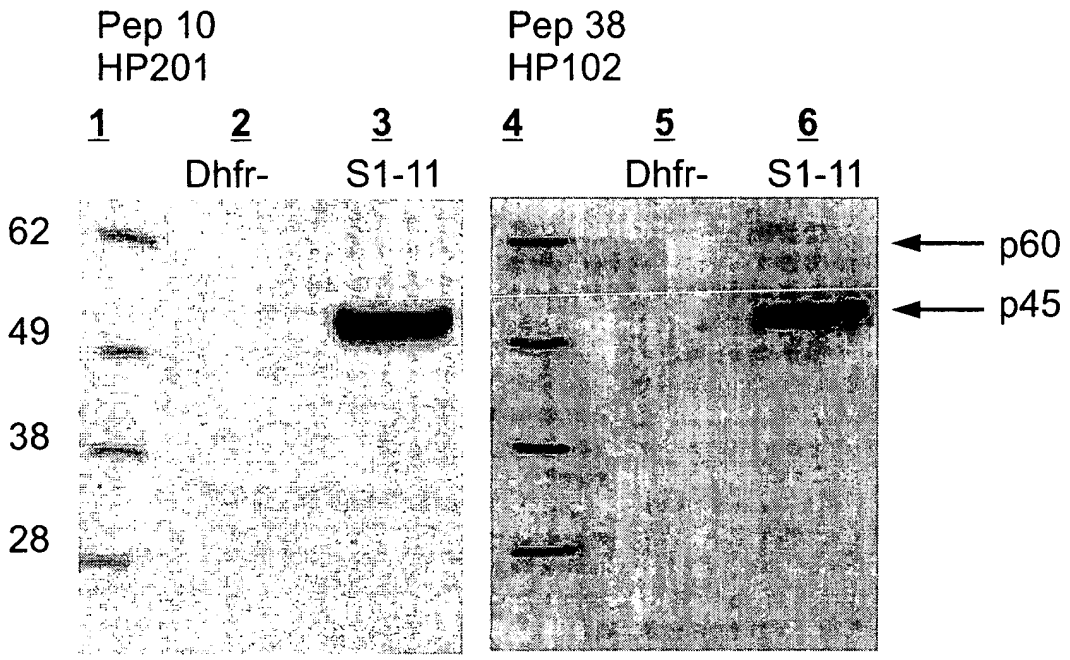


Fig. 10

Results

Group		Day 8	Day 12	Day 15	Day 18
A PBS	Mean	7.8	90.2	375.4	613.6
	SD	12.3	97.7	476.2	859.2
B HP130	Mean	0.0	34.2	188.4	298.2
	SD	0.0	42.8	165.6	111.7
C HP37/33	Mean	0.0	25.3	157.5	229.3
	SD	0.0	29.6	131.2	151.3

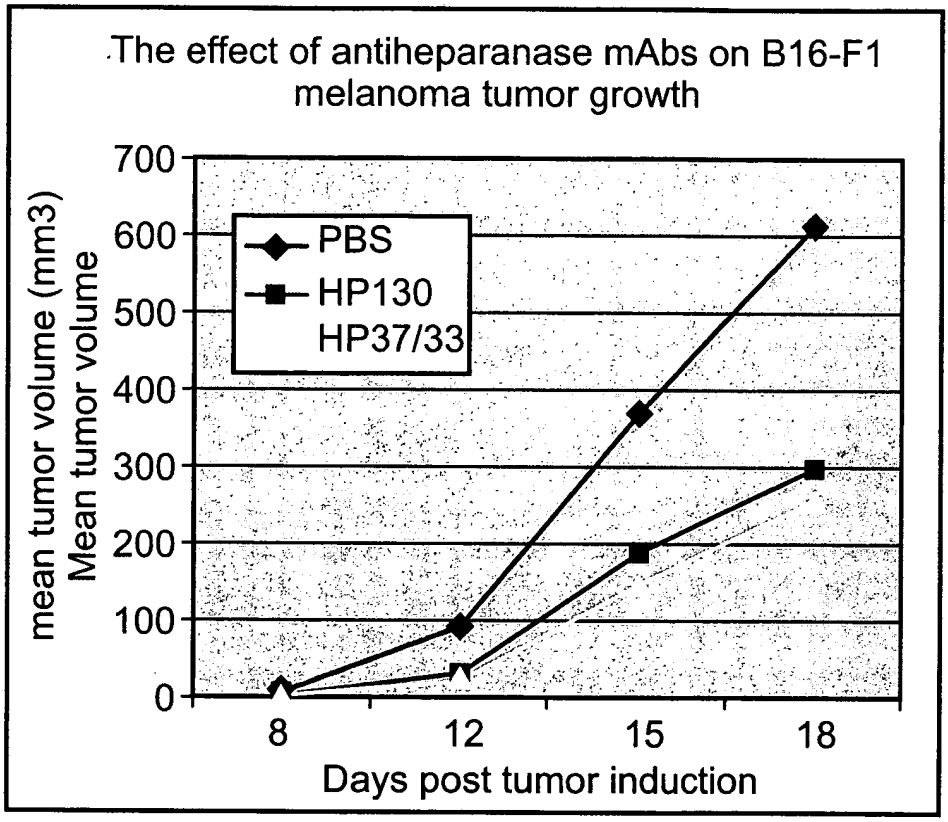


Fig. 11

Group	MEAN ARTHRITIC SCORE (4 legs)		
	Day 7	Day 11	Day 14
A-PBS	4.8	2.4	2.1
B-Mouse a human IgG3	4.9	3.4	2.5
C-HP3/17	4.2	2.1	1.5

Fig. 12

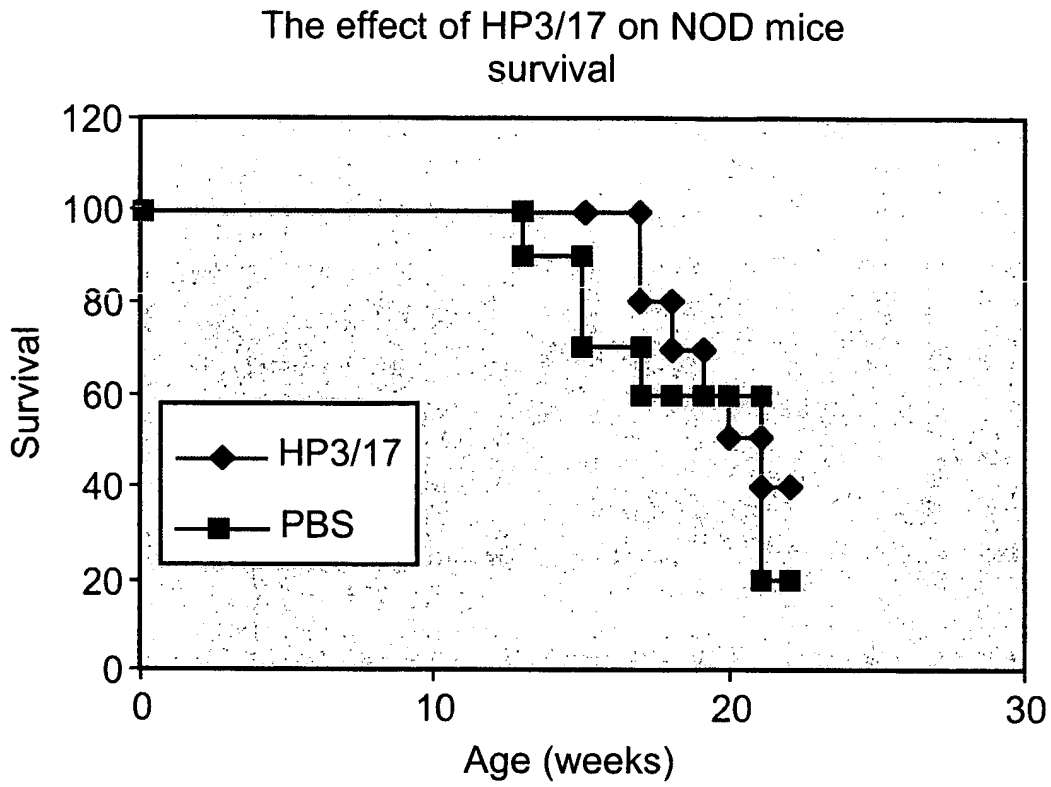


Fig. 13

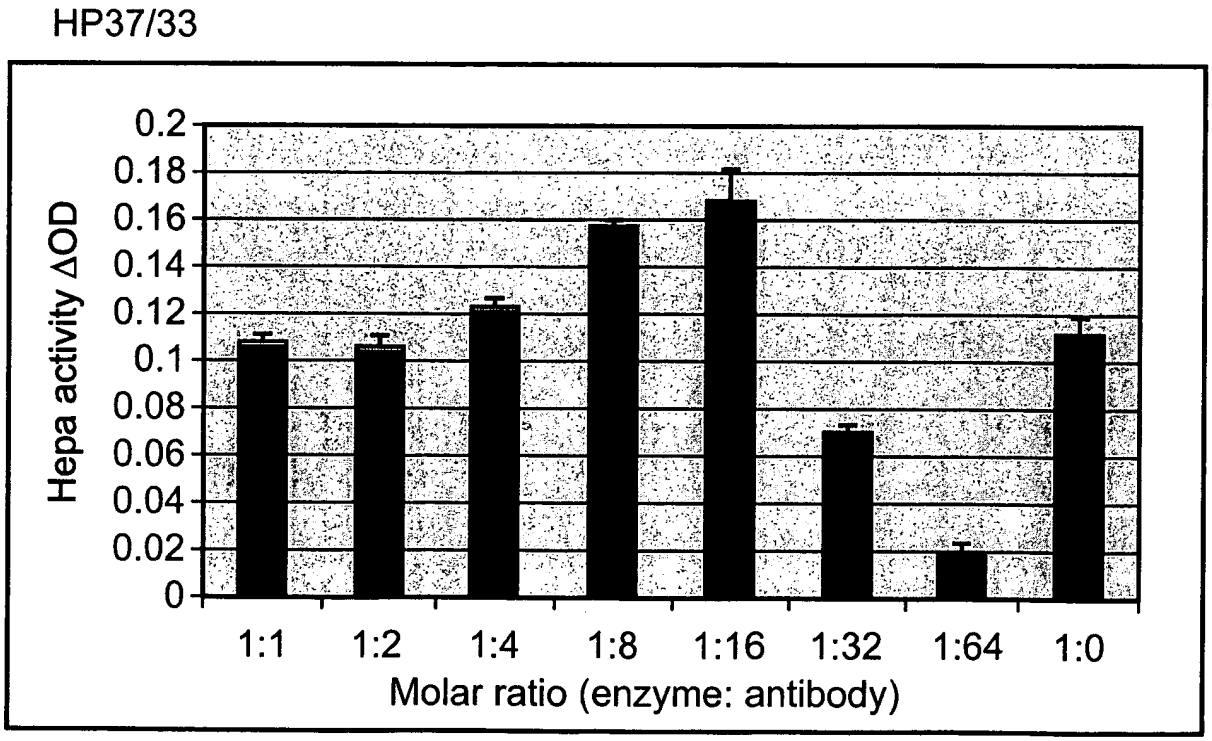


Fig. 14a

HP3/17

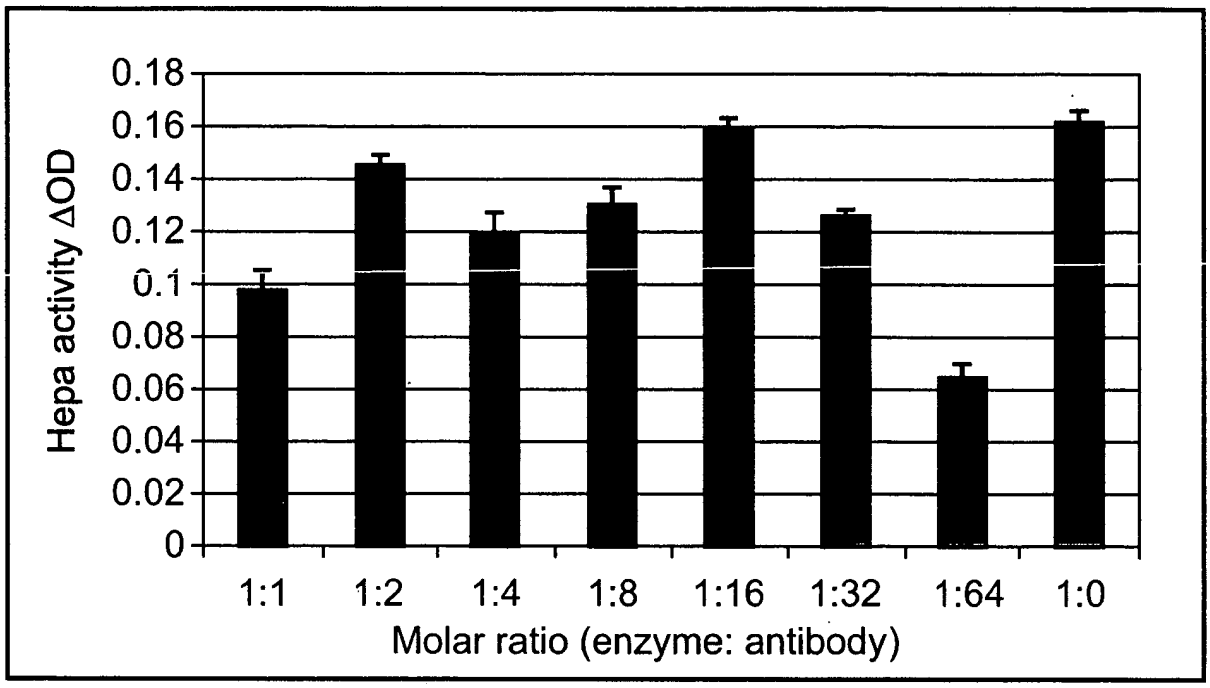
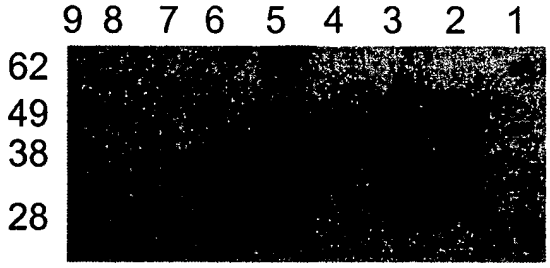


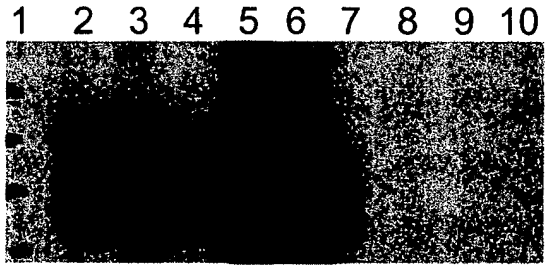
Fig. 14b

Epitope mapping



HP135.108

Fig. 15a



HP37/33

Fig. 15b

Western blot analysis

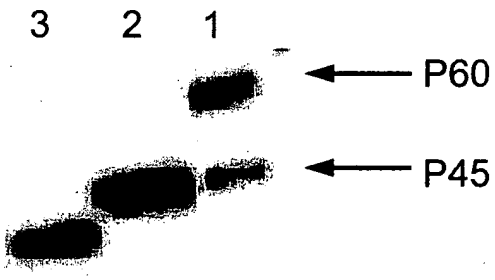


Fig. 16

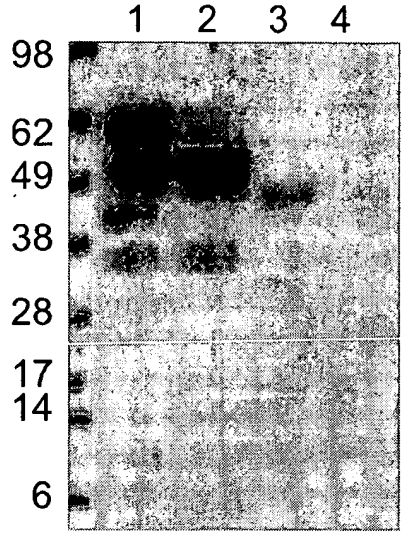


Fig. 17a

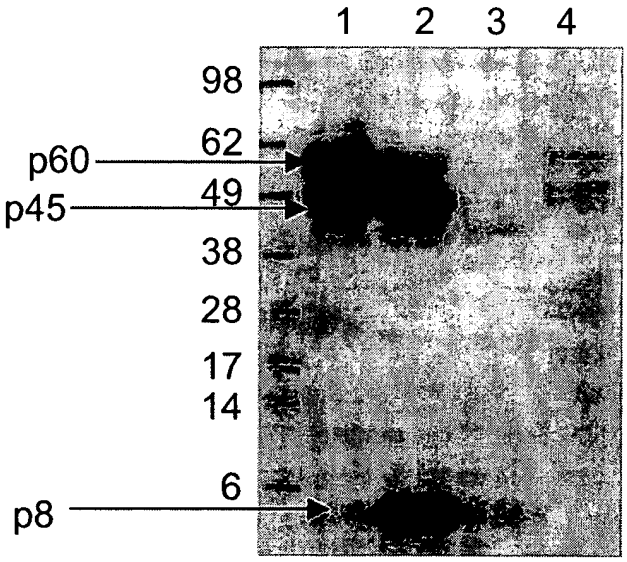


Fig. 17b

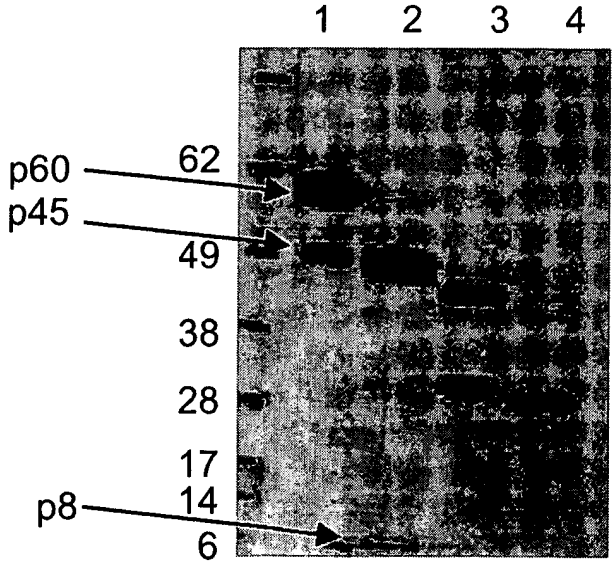


Fig. 17c